WHAT IS CLAIMED IS:

1. An optical scanning module comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a frequency of pixel information supplied to said light-emission source varies in accordance with a primary scanning position of each of pixels.

2. The optical scanning module as claimed in claim 1, further comprising a detection part that detects a displacement of said movable mirror,

wherein a frequency modulation section is

set to start after a given period of time passes since a detection signal is obtained from said detection part; and

a frequency causing said light-emission source to emit light is varied within the frequency modulation section.

3. The optical scanning module as claimed in claim 2, wherein a start timing of the frequency modulation section is varied based on the detection signal obtained from said detection part.

4. The optical scanning module as claimed in claim 2, wherein said movable mirror driving part varies an amplitude of said movable mirror so that a predetermined detection signal value may be obtained in said detection part.

5. The optical scanning module as claimed in claim 4, wherein said movable mirror driving part gradually increases the amplitude of said movable mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

6. The optical scanning module as claimed in claim 4, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

7. The optical scanning module as claimed in claim 4, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

8. The optical scanning module as claimed in claim 1, further comprising:

a detection part that detects a displacement of said movable mirror; and

a variable output setting part that sets a frequency variation section so that the frequency variation section starts after a given period of time passes since a detection signal is obtained from said detection part, and varies a light-emission output of said light-emission source in accordance with the primary scanning position.

9. The optical scanning module as claimed in claim 1, wherein said movable mirror driving part reduces or stops a rotational oscillation force provided to said movable mirror at least in a period other than an image writing period.

10. The optical scanning module as claimed

in claim 9, wherein said movable mirror driving part gradually increases the amplitude of said movable mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

11. The optical scanning module as claimed in claim 9, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

12. The optical scanning module as claimed in claim 9, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

13. An optical scanning module comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a frequency causing said light-emission source to emit light based on pixel information varies in accordance with a primary scanning position.

14. The optical scanning module as claimed in claim 13, further comprising a detection part that detects a displacement of said movable mirror,

wherein a frequency modulation section is set to start after a given period of time passes since a detection signal is obtained from said detection part; and

the frequency causing said light-emission source to emit light is varied within the frequency

modulation section.

15. The optical scanning module as claimed in claim 14, wherein a start timing of the frequency modulation section is varied based on the detection signal obtained from said detection part.

16. The optical scanning module as claimed in claim 14, wherein said movable mirror driving part varies an amplitude of said movable mirror so that a predetermined detection signal value may be obtained in said detection part.

17. The optical scanning module as claimed in claim 16, wherein said movable mirror driving part gradually increases the amplitude of said movable

mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

18. The optical scanning module as claimed in claim 16, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

19. The optical scanning module as claimed in claim 16, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

20. The optical scanning module as claimed in claim 13, further comprising:

a detection part that detects a displacement of said movable mirror; and

a variable output setting part that sets a frequency variation section so that the frequency variation section starts after a given period of time passes since a detection signal is obtained from said detection part, and varies a light-emission output of said light-emission source in accordance with the primary scanning position.

21. The optical scanning module as claimed in claim 13, wherein said movable mirror driving part reduces or stops a rotational oscillation force provided to said movable mirror at least in a period other than an image writing period.

22. The optical scanning module as claimed

in claim 21, wherein said movable mirror driving part gradually increases the amplitude of said movable mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

23. The optical scanning module as claimed in claim 21, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

24. The optical scanning module as claimed in claim 21, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

25. An optical scanning module comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam;

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions; and

a variable frequency setting part varying, in accordance with an amplitude of said movable mirror, a frequency causing said light-emission source to emit light based on pixel information.

26. The optical scanning module as claimed in claim 25, further comprising a detection part that detects a displacement of said movable mirror,

wherein a frequency modulation section is set to start after a given period of time passes since a detection signal is obtained from said detection part; and

the frequency causing said light-emission source to emit light is varied within the frequency modulation section.

27. The optical scanning module as claimed in claim 26, wherein a start timing of the frequency modulation section is varied based on the detection signal obtained from said detection part.

28. The optical scanning module as claimed in claim 26, wherein said movable mirror driving part varies the amplitude of said movable mirror so that a predetermined detection signal value may be obtained in said detection part.

29. The optical scanning module as claimed in claim 28, wherein said movable mirror driving part gradually increases the amplitude of said movable mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

30. The optical scanning module as claimed in claim 28, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

31. The optical scanning module as claimed in claim 28, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

32. The optical scanning module as claimed in claim 25, further comprising:

a detection part that detects a displacement of said movable mirror; and

a variable output setting part that sets a frequency variation section so that the frequency

variation section starts after a given period of time passes since a detection signal is obtained from said detection part, and varies a light-emission output of said light-emission source in accordance with a primary scanning position.

33. The optical scanning module as claimed in claim 25, wherein said movable mirror driving part reduces or stops a rotational oscillation force provided to said movable mirror at least in a period other than an image writing period.

34. The optical scanning module as claimed in claim 33, wherein said movable mirror driving part gradually increases the amplitude of said movable mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

35. The optical scanning module as claimed in claim 33, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

36. The optical scanning module as claimed in claim 33, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

37. An optical scanning module comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes

said movable mirror to oscillate in first and second opposite directions,

wherein a light emission period forming one pixel on a scanned surface is varied with respect to a primary scanning direction to be minimized in a vicinity of a center of an image so that a light-emission interval between each of pixels forming pixel information is minimized in the vicinity of the center of the image.

38. The optical scanning module as claimed in claim 37, further comprising a detection part that detects a displacement of said movable mirror,

wherein a frequency modulation section is set to start after a given period of time passes since a detection signal is obtained from said detection part; and

a frequency causing said light-emission source to emit light is varied within the frequency modulation section.

39. The optical scanning module as claimed in claim 38, wherein a start timing of the frequency modulation section is varied based on the detection signal obtained from said detection part.

40. The optical scanning module as claimed in claim 1, wherein said movable mirror driving part varies an amplitude of said movable mirror so that a predetermined detection signal value may be obtained in said detection part.

41. The optical scanning module as claimed in claim 40, wherein said movable mirror driving part gradually increases the amplitude of said movable mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

42. The optical scanning module as claimed in claim 40, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

43. The optical scanning module as claimed in claim 40, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

44. The optical scanning module as claimed in claim 37, further comprising:

a detection part that detects a displacement of said movable mirror; and

a variable output setting part that sets a frequency variation section so that the frequency

variation section starts after a given period of time passes since a detection signal is obtained from said detection part, and varies a light-emission output of said light-emission source in accordance with a primary scanning position.

45. The optical scanning module as claimed in claim 37, wherein said movable mirror driving part reduces or stops a rotational oscillation force provided to said movable mirror at least in a period other than an image writing period.

46. The optical scanning module as claimed in claim 45, wherein said movable mirror driving part gradually increases the amplitude of said movable mirror until the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

47. The optical scanning module as claimed in claim 45, wherein said light-emission source inhibits image writing before the predetermined detection signal value is obtained in said detection part in starting said movable mirror.

48. The optical scanning module as claimed in claim 45, wherein said movable mirror driving part stops driving said movable mirror if the predetermined detection signal value is prevented from being obtained in said detection part within a given time limit.

49. An optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a frequency of pixel information supplied to said light-emission source varies in accordance with a primary scanning position of each of pixels.

50. The optical scanning device as claimed in claim 49, wherein said light-emission source is modulated in accordance with image data;

said movable mirror is supported by torsion bars provided to a support substrate so as to be oscillatable about the torsion bars as a rotary shaft; and

said movable mirror driving part causes said movable mirror to oscillate by periodically generating attraction or a repulsive force between

said support substrate and said movable mirror by switching voltages applied to said movable mirror driving part, said movable mirror driving part being provided on both of end parts of said movable mirror, the end parts being positioned on opposite sides of each of the torsion bars.

51. The optical scanning device as claimed in claim 50, wherein the light beam emitted from said light-emission source of each of said optical scanning modules is caused to scan a region in the primary scanning direction by said movable mirror so that image recording is performed by connecting the regions scanned by the light beams of said optical scanning modules.

52. The optical scanning device as claimed in claim 51, further comprising a variable pixel frequency setting part that varies the pixel

frequency modulating said light-emission source in accordance with an amount of oscillation of said movable mirror.

53. The optical scanning device as claimed in claim 52, further comprising beam detection parts each detecting a position of the light beam deflected by said movable mirror, the beam detection parts being provided outside the scanned region at positions corresponding to scanning starting and termination ends of each of the optical scanning modules, respectively,

wherein said variable pixel frequency setting part varies the pixel frequency based on a scanning period between detections of the light beam by the beam detection parts.

54. The optical scanning device as claimed in claim 52, wherein said variable pixel frequency

setting part varies the pixel frequency in a plurality of steps during one scan.

55. The optical scanning device as claimed in claim 52, further comprising a variable driving current setting part that varies, in accordance with the pixel frequency, a driving current supplied to said light-emission source so as to vary an amount of light emitted therefrom.

56. The optical scanning device as claimed in claim 51, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region at a position corresponding to a scanning starting end of each of the optical scanning modules,

wherein, a reference signal for starting image writing is switched between detection signals

output from the beam detection part based on timing of application of the driving voltages to said movable mirror driving part.

57. The optical scanning device as claimed in claim 51, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region of each of the optical scanning modules,

wherein the light beam is turned within a region detectable by said beam detection part so as to perform scanning in the first and second opposite directions.

58. The optical scanning device as claimed in claim 51, wherein the optical scanning modules are arranged so that the scanned regions of each adjacent two of the optical scanning modules are apart from

each other by one scanning pitch in a secondary scanning direction; and

timing phases of the driving voltages applied to the movable mirror driving parts of the optical scanning modules coincide substantially.

59. The optical scanning device as claimed in claim 51, further comprising a pair of buffer parts alternating in temporarily storing the image data so that each of the buffer parts stores image data for every other scanning line,

wherein the light beam emitted from said light-emission source is deflected by said movable mirror so as to scan the scanned region in the first and second opposite directions; and

the image data is read out alternately from the paired buffer parts in first and second respective orders reverse to each other based on timing of the driving voltages applied to said movable mirror driving part.

60. An optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a frequency causing said light-emission source to emit light based on pixel information varies in accordance with a primary scanning position.

61. The optical scanning device as claimed in claim 60, wherein said light-emission source is modulated in accordance with image data;

said movable mirror is supported by torsion

bars provided to a support substrate so as to be oscillatable about the torsion bars as a rotary shaft; and

said movable mirror driving part causes said movable mirror to oscillate by periodically generating attraction or a repulsive force between said support substrate and said movable mirror by switching voltages applied to said movable mirror driving part, said movable mirror driving part being provided on both of end parts of said movable mirror, the end parts being positioned on opposite sides of each of the torsion bars.

62. The optical scanning device as claimed in claim 61, wherein the light beam emitted from said light-emission source of each of said optical scanning modules is caused to scan a region in the primary scanning direction by said movable mirror so that image recording is performed by connecting the regions scanned by the light beams of said optical scanning modules.

63. The optical scanning device as claimed in claim 62, further comprising a variable pixel frequency setting part that varies the pixel frequency modulating said light-emission source in accordance with an amount of oscillation of said movable mirror.

64. The optical scanning device as claimed in claim 63, further comprising beam detection parts each detecting a position of the light beam deflected by said movable mirror, the beam detection parts being provided outside the scanned region at positions corresponding to scanning starting and termination ends of each of the optical scanning modules, respectively,

wherein said variable pixel frequency setting part varies the pixel frequency based on a scanning period between detections of the light beam by the beam detection parts.

65. The optical scanning device as claimed in claim 63, wherein said variable pixel frequency setting part varies the pixel frequency in a plurality of steps during one scan.

66. The optical scanning device as claimed in claim 63, further comprising a variable driving current setting part that varies, in accordance with the pixel frequency, a driving current supplied to said light-emission source so as to vary an amount of light emitted therefrom.

67. The optical scanning device as claimed in claim 62, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region at a position corresponding to a scanning starting end of each of the optical scanning modules,

wherein, a reference signal for starting image writing is switched between detection signals output from the beam detection part based on timing of application of the driving voltages to said movable mirror driving part.

68. The optical scanning device as claimed in claim 62, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region of each of the optical scanning modules,

wherein the light beam is turned within a region detectable by said beam detection part so as to perform scanning in the first and second opposite directions.

69. The optical scanning device as claimed in claim 62, wherein the optical scanning modules are

arranged so that the scanned regions of each adjacent two of the optical scanning modules are apart from each other by one scanning pitch in a secondary scanning direction; and

timing phases of the driving voltages applied to the movable mirror driving parts of the optical scanning modules coincide substantially.

70. The optical scanning device as claimed in claim 62, further comprising a pair of buffer parts alternating in temporarily storing the image data so that each of the buffer parts stores image data for every other scanning line,

wherein the light beam emitted from said light-emission source is deflected by said movable mirror so as to scan the scanned region in the first and second opposite directions; and

the image data is read out alternately from the paired buffer parts in first and second respective orders reverse to each other based on timing of the driving voltages applied to said movable mirror driving part.

71. An optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions; and

a variable pixel frequency setting part varying, in accordance with an amplitude of said movable mirror, a frequency causing said light-emission source to emit light based on pixel information.

72. The optical scanning device as claimed in claim 71, wherein said light-emission source is modulated in accordance with image data;

said movable mirror is supported by torsion bars provided to a support substrate so as to be oscillatable about the torsion bars as a rotary shaft; and

said movable mirror driving part causes said movable mirror to oscillate by periodically generating attraction or a repulsive force between said support substrate and said movable mirror by switching voltages applied to said movable mirror driving part, said movable mirror driving part being provided on both of end parts of said movable mirror, the end parts being positioned on opposite sides of each of the torsion bars.

73. The optical scanning device as claimed in claim 72, wherein the light beam emitted from said light-emission source of each of said optical scanning modules is caused to scan a region in the primary scanning direction by said movable mirror so that image recording is performed by connecting the regions scanned by the light beams of said scanning modules.

74. The optical scanning device as claimed in claim 73, further comprising beam detection parts each detecting a position of the light beam deflected by said movable mirror, the beam detection parts being provided outside the scanned region at positions corresponding to scanning starting and termination ends of each of the optical scanning modules, respectively,

wherein said variable pixel frequency setting part varies the pixel frequency based on a scanning period between detections of the light beam by the beam detection parts.

75. The optical scanning device as claimed in claim 73, wherein said variable pixel frequency setting part varies the pixel frequency in a plurality of steps during one scan.

76. The optical scanning device as claimed

in claim 73, further comprising a variable driving current setting part that varies, in accordance with the pixel frequency, a driving current supplied to said light-emission source so as to vary an amount of light emitted therefrom.

77. The optical scanning device as claimed in claim 73, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region at a position corresponding to a scanning starting end of each of the optical scanning modules,

wherein, a reference signal for starting image writing is switched between detection signals output from the beam detection part based on timing of application of the driving voltages to said movable mirror driving part.

78. The optical scanning device as claimed in claim 73, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region of each of the optical scanning modules,

wherein the light beam is turned within a region detectable by said beam detection part so as to perform scanning in the first and second opposite directions.

79. The optical scanning device as claimed in claim 73, wherein the optical scanning modules are arranged so that the scanned regions of each adjacent two of the optical scanning modules are apart from each other by one scanning pitch in a secondary scanning direction; and

timing phases of the driving voltages applied to the movable mirror driving parts of the optical scanning modules coincide substantially.

80. The optical scanning device as claimed in claim 73, further comprising a pair of buffer parts alternating in temporarily storing the image data so that each of the buffer parts stores image data for every other scanning line,

wherein the light beam emitted from said light-emission source is deflected by said movable mirror so as to scan the scanned region in the first and second opposite directions; and

the image data is read out alternately from the paired buffer parts in first and second respective orders reverse to each other based on timing of the driving voltages applied to said movable mirror driving part.

81. An optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a

light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a light emission period forming one pixel on a scanned surface is varied with respect to a primary scanning direction to be minimized in a vicinity of a center of an image so that a light-emission interval between each of pixels forming pixel information is minimized in the vicinity of the center of the image.

82. The optical scanning device as claimed in claim 81, wherein said light-emission source is modulated in accordance with image data;

said movable mirror is supported by torsion bars provided to a support substrate so as to be oscillatable about the torsion bars as a rotary shaft; and

said movable mirror driving part causes said

movable mirror to oscillate by periodically generating attraction or a repulsive force between said support substrate and said movable mirror by switching voltages applied to said movable mirror driving part, said movable mirror driving part being provided on both of end parts of said movable mirror, the end parts being positioned on opposite sides of each of the torsion bars.

83. The optical scanning device as claimed in claim 82, wherein the light beam emitted from said light-emission source of each of said optical scanning modules is caused to scan a region in the primary scanning direction by said movable mirror so that image recording is performed by connecting the regions scanned by the light beams of said optical scanning modules.

84. The optical scanning device as claimed

in claim 83, further comprising a variable pixel frequency setting part that varies the pixel frequency modulating said light-emission source in accordance with an amount of oscillation of said movable mirror.

85. The optical scanning device as claimed in claim 84, further comprising beam detection parts each detecting a position of the light beam deflected by said movable mirror, the beam detection parts being provided outside the scanned region at positions corresponding to scanning starting and termination ends of each of the optical scanning modules, respectively,

wherein said variable pixel frequency setting part varies the pixel frequency based on a scanning period between detections of the light beam by the beam detection parts.

86. The optical scanning device as claimed in claim 84, wherein said variable pixel frequency setting part varies the pixel frequency in a plurality of steps during one scan.

87. The optical scanning device as claimed in claim 84, further comprising a variable driving current setting part that varies, in accordance with the pixel frequency, a driving current supplied to said light-emission source so as to vary an amount of light emitted therefrom.

88. The optical scanning device as claimed in claim 83, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region at a position corresponding to a scanning starting end of each of the optical scanning modules,

wherein, a reference signal for starting image writing is switched between detection signals output from the beam detection part based on timing of application of the driving voltages to said movable mirror driving part.

89. The optical scanning device as claimed in claim 83, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region of each of the optical scanning modules,

wherein the light beam is turned within a region detectable by said beam detection part so as to perform scanning in the first and second opposite directions.

90. The optical scanning device as claimed in claim 83, wherein the optical scanning modules are

arranged so that the scanned regions of each adjacent two of the optical scanning modules are apart from each other by one scanning pitch in a secondary scanning direction; and

timing phases of the driving voltages applied to the movable mirror driving parts of the optical scanning modules coincide substantially.

91. The optical scanning device as claimed in claim 83, further comprising a pair of buffer parts alternating in temporarily storing the image data so that each of the buffer parts stores image data for every other scanning line,

wherein the light beam emitted from said light-emission source is deflected by said movable mirror so as to scan the scanned region in the first and second opposite directions; and

the image data is read out alternately from the paired buffer parts in first and second respective orders reverse to each other based on timing of the driving voltages applied to said movable mirror driving part.

92. An imaging apparatus comprising:

an optical scanning device,

the optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a frequency of pixel information supplied to said light-emission source varies in accordance with a primary scanning position of each of pixels; and

an electrostatic image is formed on an image holding body by dividing an image region thereon in the primary scanning direction of each of said optical scanning modules and is made visible by toner to be transferred onto an output sheet of paper.

93. The imaging apparatus as claimed in claim 92, wherein image recording is performed by dividing image data of one line into a number of the optical scanning modules with respect to an image formation part performing a monochrome image formation.

94. The imaging apparatus as claimed in claim 92, wherein said optical scanning device is provided to each of imaging parts of different colors forming a full-color image; and

image recording is performed individually based on image data corresponding to each of the colors.

95. The imaging apparatus as claimed in claim 92, wherein said optical scanning device is provided to be shared by imaging parts of different colors forming a full-color image; and

image recording is performed in time series based on image data corresponding to each of the colors.

96. The imaging apparatus as claimed in claim 92, wherein the optical scanning device is provided for one or more of colors of respective imaging parts; and

image recording is performed in time series based on image data corresponding each of the colors.

97. An imaging apparatus comprising:

an optical scanning device,

the optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a frequency causing said light-emission source to emit light based on pixel information varies in accordance with a primary scanning position; and

an electrostatic image is formed on an image holding body by dividing an image region thereon in the primary scanning direction of each of said optical scanning modules and is made visible by toner to be transferred onto an output sheet of paper.

98. The imaging apparatus as claimed in claim 97, wherein image recording is performed by dividing image data of one line into a number of the optical scanning modules with respect to an image formation part performing a monochrome image

formation.

99. The imaging apparatus as claimed in claim 97, wherein said optical scanning device is provided to each of imaging parts of different colors forming a full-color image; and

image recording is performed individually based on image data corresponding to each of the colors.

100. The imaging apparatus as claimed in claim 97, wherein said optical scanning device is provided to be shared by imaging parts of different colors forming a full-color image; and

image recording is performed in time series based on image data corresponding to each of the colors.

101. The imaging apparatus as claimed in claim 97, wherein the optical scanning device is provided for one or more of colors of respective imaging parts; and

image recording is performed in time series based on image data corresponding each of the colors.

102. An imaging apparatus comprising:

an optical scanning device,

the optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions; and

a variable pixel frequency setting part varying, in accordance with an amplitude of said movable mirror, a frequency causing said light-emission source to emit light based on pixel information,

wherein an electrostatic image is formed on an image holding body by dividing an image region thereon in the primary scanning direction of each of said optical scanning modules and is made visible by toner to be transferred onto an output sheet of paper.

103. The imaging apparatus as claimed in claim 102, wherein image recording is performed by dividing image data of one line into a number of the optical scanning modules with respect to an image formation part performing a monochrome image formation.

104. The imaging apparatus as claimed in

claim 102, wherein said optical scanning device is provided to each of imaging parts of different colors forming a full-color image; and

image recording is performed individually based on image data corresponding to each of the colors.

105. The imaging apparatus as claimed in claim 102, wherein said optical scanning device is provided to be shared by imaging parts of different colors forming a full-color image; and

image recording is performed in time series based on image data corresponding to each of the colors.

106. The imaging apparatus as claimed in claim 102, wherein the optical scanning device is provided for one or more of colors of respective imaging parts; and

image recording is performed in time series based on image data corresponding each of the colors.

107. An imaging apparatus comprising:

an optical scanning device,

the optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein a light emission period forming one pixel on a scanned surface is varied with respect to a primary scanning direction to be minimized in a vicinity of a center of an image so that a light-

emission interval between each of pixels forming pixel information is minimized in the vicinity of the center of the image; and

an electrostatic image is formed on an image holding body by dividing an image region thereon in the primary scanning direction of each of said optical scanning modules and is made visible by toner to be transferred onto an output sheet of paper.

108. The imaging apparatus as claimed in claim 107, wherein image recording is performed by dividing image data of one line into a number of the optical scanning modules with respect to an image formation part performing a monochrome image formation.

109. The imaging apparatus as claimed in claim 107, wherein said optical scanning device is provided to each of imaging parts of different colors

forming a full-color image; and

image recording is performed individually based on image data corresponding to each of the colors.

110. The imaging apparatus as claimed in claim 107, wherein said optical scanning device is provided to be shared by imaging parts of different colors forming a full-color image; and

image recording is performed in time series based on image data corresponding to each of the colors.

111. The imaging apparatus as claimed in claim 107, wherein the optical scanning device is provided for one or more of colors of respective imaging parts; and

image recording is performed in time series based on image data corresponding each of the colors.

112. An optical scanning method employing an optical scanning device that causes a light beam emitted from a light-emission source to perform scanning by deflecting the light beam by a movable mirror oscillating in first and second opposite directions in a resonant state,

wherein image writing is performed by selecting, in accordance with a resonant frequency of the movable mirror, a reference frequency causing the light-emission source to emit light based on pixel information.

113. An optical scanning method employing an optical scanning device that causes a light beam emitted from a light-emission source to perform scanning by deflecting the light beam by a movable mirror oscillating in first and second opposite directions in a resonant state,

wherein image writing is performed by supplying the light-emission source with pixel information whose frequency is varied in accordance with a primary scanning position of each of pixels.

114. An optical scanning method employing an optical scanning device that causes a light beam emitted from a light-emission source to perform scanning by deflecting the light beam by a movable mirror oscillating in first and second opposite directions in a resonant state, the optical scanning method comprising the steps of:

(a) detecting an oscillation displacement of the movable mirror;

(b) setting a frequency variation section based on a detection signal obtained by said step (a); and

(c) performing image writing while varying, step by step from a reference frequency in the frequency variation section, a frequency causing the light-emission source to emit light based on pixel information.

115. An optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein control is performed so that a termination end of one of images formed by scanning by the light beams of said optical scanning modules coincides with a starting end of an adjacent one of the images.

116. The optical scanning device as claimed in claim 115, wherein said light-emission source is modulated in accordance with image data;

said movable mirror is supported by torsion bars provided to a support substrate so as to be oscillatable about the torsion bars as a rotary shaft; and

said movable mirror driving part causes said movable mirror to oscillate by periodically generating attraction or a repulsive force between said support substrate and said movable mirror by switching voltages applied to said movable mirror driving part, said movable mirror driving part being provided on both of end parts of said movable mirror, the end parts being positioned on opposite sides of each of the torsion bars.

117. The optical scanning device as claimed in claim 116, wherein the light beam emitted from said light-emission source of each of said optical scanning modules is caused to scan a region in the primary scanning direction by said movable mirror so that image recording is performed by connecting the regions scanned by the light beams of said optical scanning modules.

118. The optical scanning device as claimed in claim 117, further comprising a variable pixel frequency setting part that varies a pixel frequency modulating said light-emission source in accordance with an amount of oscillation of said movable mirror.

119. The optical scanning device as claimed in claim 118, further comprising beam detection parts each detecting a position of the light beam deflected by said movable mirror, the beam detection parts being provided outside the scanned region at positions corresponding to scanning starting and termination ends of each of the optical scanning modules, respectively,

wherein said variable pixel frequency setting part varies the pixel frequency based on a scanning period between detections of the light beam by the beam detection parts.

120. The optical scanning device as claimed in claim 118, wherein said variable pixel frequency setting part varies the pixel frequency in a plurality of steps during one scan.

121. The optical scanning device as claimed in claim 118, further comprising a variable driving current setting part that varies, in accordance with the pixel frequency, a driving current supplied to said light-emission source so as to vary an amount of light emitted therefrom.

122. The optical scanning device as claimed in claim 117, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region at a position corresponding to a scanning starting end of each of the optical scanning modules,

wherein, a reference signal for starting image writing is switched between detection signals output from the beam detection part based on timing of application of the driving voltages to said movable mirror driving part.

123. The optical scanning device as claimed in claim 117, further comprising a beam detection part detecting a position of the light beam deflected by said movable mirror, the beam detection part being provided outside the scanned region of each of the optical scanning modules,

wherein the light beam is turned within a region detectable by said beam detection part so as to perform scanning in the first and second opposite directions.

124. The optical scanning device as claimed in claim 117, wherein the optical scanning modules

are arranged so that the scanned regions of each adjacent two of the optical scanning modules are apart from each other by one scanning pitch in a secondary scanning direction; and

timing phases of the driving voltages applied to the movable mirror driving parts of the optical scanning modules coincide substantially.

125. The optical scanning device as claimed in claim 117, further comprising a pair of buffer parts alternating in temporarily storing the image data so that each of the buffer parts stores image data for every other scanning line,

wherein the light beam emitted from said light-emission source is deflected by said movable mirror so as to scan the scanned region in the first and second opposite directions; and

the image data is read out alternately from the paired buffer parts in first and second respective orders reverse to each other based on timing of the driving voltages applied to said movable mirror driving part.

126. An imaging apparatus comprising:

an optical scanning device,

the optical scanning device comprising:

a plurality of optical scanning modules arranged so that primary scanning directions thereof coincide with each other,

the optical scanning modules each comprising:

a light-emission source emitting a light beam;

a movable mirror reflecting the light beam; and

a movable mirror driving part that causes said movable mirror to oscillate in first and second opposite directions,

wherein control is performed so that a termination end of one of images formed by scanning by the light beams of said optical scanning modules coincides with a starting end of an adjacent one of the images; and

an electrostatic image is formed on an image holding body by dividing an image region thereon in the primary scanning direction of each of said optical scanning modules and is made visible by toner to be transferred onto an output sheet of paper.

127. The imaging apparatus as claimed in claim 126, wherein image recording is performed by dividing image data of one line into a number of the optical scanning modules with respect to an image formation part performing a monochrome image formation.

128. The imaging apparatus as claimed in claim 126, wherein said optical scanning device is provided to each of imaging parts of different colors forming a full-color image; and

image recording is performed individually based on image data corresponding to each of the colors.

129. The imaging apparatus as claimed in claim 126, wherein said optical scanning device is provided to be shared by imaging parts of different colors forming a full-color image; and

image recording is performed in time series based on image data corresponding to each of the colors.

130. The imaging apparatus as claimed in claim 126, wherein the optical scanning device is provided for one or more of colors of respective imaging parts; and

image recording is performed in time series based on image data corresponding each of the colors.